

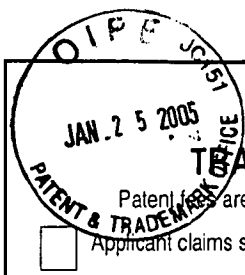
2831/\$

<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing)	Application Number	09/928,737	
	Filing Date	August 13, 2001	
	First Named Inventor	Son K. Quan	
	Group Art Unit	2831	
	Examiner Name	Hung V. Ngo	
Total Number of Pages in this Submission	9	Attorney Docket Number	SC09785T CD1

ENCLOSURES		(check all that apply)
<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-Related papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/Declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation, Change of Correspondence Address	<input type="checkbox"/> Status Letter with appropriate copies
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Terminal Disclaimer	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below) References D-1 thru D-30 Return Postcard
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Request for Refund	
<input checked="" type="checkbox"/> Information Disclosure Statement & Form PTO/SB/08	<input type="checkbox"/> CD, Number of CDs	
<input type="checkbox"/> Certified Copy of Priority Documents		
<input type="checkbox"/> Response to Missing Parts/Incomplete Application	Remarks	
<input type="checkbox"/> Response to Missing Parts Under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm or Individual	Robert L. King	Registration No.	30,185
Signature	<i>Robert L. King</i>		
Date	1/19/2005		

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 on the date listed below:	
Typed or printed name	Pat Thomas
Signature	<i>Pat Thomas</i>
Date	1-21-05



**FEE TRANSMITTAL**

Patent fees are subject to annual revision

Applicant claims small entity status. See 37 CFR 1.27

**Complete if Known**

Application Number	09/928,737
Filing Date	August 13, 2001
First Named Inventor	Son K. Quan
Examiner Name	Hung V. Ngo
Group Art Unit	2831
Attorney Docket No.	SC09785T CD1

TOTAL AMOUNT OF PAYMENT (\$)**180**

**METHOD OF PAYMENT (check all that apply)**

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number **503079**  
Deposit Account Name **Freescall Semiconductor, Inc.**

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☐ Charge any additional fee(s) during the pendency of this application

☐ Charge fees(s) indicated below, except for the filing fee to the above-identified deposit account.

**FEE CALCULATION**

**1. BASIC FILING FEE**

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	780	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) (\$)

**2. EXTRA CLAIM FEES**

Total Claims	Previously Paid**	Extra Claims	Fee from below	Fee Paid
	20	X	18	
Independent Claims	3	X	86	

Multiple Dependent

280 =

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	84	2201	42	Independent claims in excess of 3
1203	280	2203	140	Multiple dependent claim, if not paid
1204	84	2204	42	* Reissue independent claims over original patent
1205	18	2205	9	* Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

\*\*or number previously paid, if greater; For Reissues, see above.

**FEE CALCULATION (continued)**

**3. ADDITIONAL FEES**

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
1051	130	2051	65	Surcharge - late filing fee or oath
1052	50	2052	25	Surcharge - late Provisional filing
1053	130	1053	130	Non-English specification
1812	2520	1812	2520	For filing a request for ex parte Reexamination
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action
1805	1840*	1805	1840*	Requesting publication of SIR after Examiner action
1251	110	2251	55	Extension for reply within first month
1252	420	2252	210	Extension for reply within second month
1253	950	2253	475	Extension for reply within third month
1254	1480	2254	740	Extension for reply within fourth month
1255	2010	2255	1005	Extension for reply within fifth month
1401	330	2401	165	Notice of Appeal
1402	330	2402	165	Filing a brief in support of an appeal
1403	290	2403	145	Request for oral hearing
1451	1510	1451	1510	Petition to institute a public use proceeding
1452	110	2452	55	Petition to revive - unavoidable
1453	1330	2453	665	Petition to revive - unintentional
1501	1330	2501	665	Utility issue fee (or reissue)
1502	480	2502	240	Design issue fee
1503	640	2503	320	Plant issue fee
1460	130	1460	130	Petitions to the Commissioner
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)
1806	180	1806	180	Submission of IDS
8021	40	8021	40	Recording each patent assignment per property (times number of properties)
1809	770	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))
1810	770	2810	385	For each additional invention to be examined (37 CFR § 1.129(b))
1801	770	2801	385	Request for Continued Examination (RCE)
1802	900	1802	900	Request for expedited examination of a design application

Other fee (specify)

SUBTOTAL (3) (\$)**180**

\* Reduced by Basic Filing Fee Paid

**SUBMITTED BY**

Name (Print/Type) **Robert L. King**  
Signature *Robert L. King*

**Complete (if applicable)**

Registration No. **30,185** Telephone **512.996.6839**  
Date **1/19/2005**



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Son K. Quan et al. Group Art Unit: 2831  
Application No.: 09/928,737 Examiner: Hung V. Ngo  
Date Filed: August 13, 2001  
Title: SEMICONDUCTOR PACKAGE AND METHOD THEREFOR

CERTIFICATE OF MAILING

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO: ASSISTANT COMMISSIONER FOR PATENTS ALEXANDRIA, VA 22313, ON: 1-21-05

Date of Deposit

*Pat Thomas*

Pat Thomas

INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner For Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

SIR:

In accordance with 37 C.F.R. §1.56 and in compliance with 37 C.F.R. §1.98, the references listed on attached Form PTO/SB/08 and/or subsequently identified herein, are being submitted herewith for consideration by the United States Patent and Trademark Office. The Office hereby waives the requirement under 37 CFR 1.98 (a)(2)(i) for submitting a copy of each cited U.S. patent and each U.S. patent application publication for all U.S. national patent applications filed after June 30, 2003 and for all international applications that have entered the national stage under 35 USC § 371 after June 30, 2003. See 37 CFR 1.491(b).

I. COPIES

- a. ☒ A legible copy of (i) each foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed, is included herewith.  
b. ☐ Any patents, publications or other information which are listed on PTO/SB/08 which are not enclosed herewith were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. §120:

U.S. Serial Number

U.S. Filing Date

II. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)

- a. ☒ Except as may be indicated below in (b) of this section, all of the patents, publications or other information are in the English language (concise explanation not required).  
b. ☒ A concise explanation of the relevance of all patents, publications or other information listed that is not in the English language is as follows: English translation is provided for cited references D-12 and D-13.  
c. ☐ The following additional information is provided for the Examiner's consideration:

III. ☐ CROSS REFERENCE TO RELATED APPLICATION(S)

The Examiner is advised that the following co-pending application(s) contain(s) subject matter that may be related to the present application. By bringing this (these) applications to the Examiner's attention, Applicant(s) does(do) not waive the confidentiality provisions of 35 U.S.C. §122.

01/28/2005 HGBREH1 00001061503079 09928737

Filing Date

Art Unit

01 FC:1806 180.00 DA

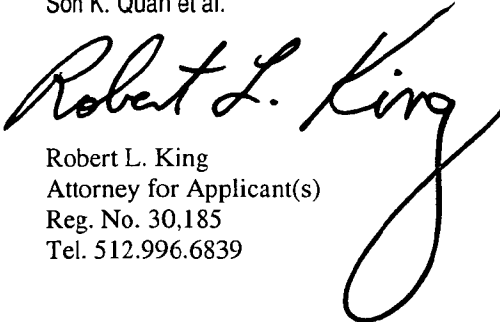
## FEES

- IV. ☐ THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(b): (check one box)
- a. ☐ within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. §1.97(b)(1)). No fee or statement is required.
  - b. ☐ within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. §1.97(b)(2)). No fee or statement is required.
  - c. ☐ before the mailing date of a first Office Action on the merits (37 C.F.R. §1.97(b)(3)). No fee or statement is required.
  - d. ☐ before the mailing date of a first Office Action after the filing of a request for continued examination under § 1.114 (37 C.F.R. § 1.97(b)(4)). No fee or statement is required.
- V. ☐ THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(c): (check one box)  
before the mailing date of any of a Final Office Action under 37 C.F.R. §1.113, a Notice of Allowance under 37 C.F.R. §1.311, or an action that otherwise closes prosecution in the application (See 37 C.F.R. §1.97(c)).
- a. ☐ No statement; therefore, charge Deposit Account **503079, Freescale Semiconductor, Inc.** the fee set forth in 37 C.F.R. §1.17(p).
  - b. ☐ See the statement below. No fee is required.
- VI. ☒ THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(d):  
on or before payment of the issue fee and is accompanied by the following:
- 1) a statement under 37 C.F.R. §1.97(e) as provided below; and
  - 2) charge Deposit Account **503079, Freescale Semiconductor, Inc.** the petition fee set forth in §1.17(p).
- VII. ☐ STATEMENT UNDER 37 C.F.R. §1.97(e) (check only one box, if applicable)  
The undersigned hereby states that
- a. ☐ each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of IDS; or
  - b. ☐ no item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application, and to knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement, or
  - c. ☐ some of the items of information contained in the IDS were cited in a communication from a foreign Patent Office. As to this information, the undersigned states that each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby states that no item of this remaining information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application or, to the knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement.
- VIII. PAYMENT OF FEES
- ☐ A check in the amount of \_\_\_\_\_ is enclosed for the above-identified fee(s).
  - ☐ Please charge Deposit Account No. **503079, Freescale Semiconductor, Inc.** in the amount of \$180.00 for the above-indicated fee(s).
  - ☒ If Applicant has overlooked any additional fees, or if any overpayment has been made, the Commissioner is hereby authorized to credit or debit Deposit Account **503079, Freescale Semiconductor, Inc.**
  - ☐ Two Copies of this paper are attached for Deposit Account charges and debits.

The above references are being cited only in the interests of candor and without any admission that they constitute statutory prior art or contain matter which anticipates the invention or which would render the same obvious, either singly or in a combination, to a person of ordinary skill in the art.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. **503079, Freescale Semiconductor, Inc.**

Respectfully submitted,  
Son K. Quan et al.

  
Robert L. King  
Attorney for Applicant(s)  
Reg. No. 30,185  
Tel. 512.996.6839

FREESCALE SEMICONDUCTOR, INC.  
Customer Number 23125

Enclosures: ☒ Information Disclosure  
☒ Statement by Applicant  
☐ References D-1 thru D-30  
☐ Foreign Search Report  
☐ Other:





# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(use as many sheets as necessary)*

**Complete if Known**

Application Number	09/928,737
Filing Date	August 13, 2001
First Named Inventor	Son K. Quan et al.
Group Art Unit	2831
Examiner Name	Hung V. Ngo
Attorney Docket Number	SC09785T CD1

Sheet 2 of 3

## **NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
/HN/	D-14	HOTTA, Yuji et al.; "Foil covered PACKage (FPAC): A New Package concept"; Electronic Components & Techonogy Conference; 1996; Cover Page & pp 1258-1264; IEEE Catalog No. 96CH35931.	
/HN/	D-15	YIP, Laurene et al; "Package Warpage Evaluation for High Performance PQFP"; 45 <sup>th</sup> Electronic Components and Technology Conference; 1995; Cover Page & pp 229-233; IEEE Catalog No. 95CH3582-0.	
/HN/	D-16	HYSOL® FP4451 Flow Control Dam Product Bulletin; Dexter Electronic Materials Division; 2 pgs; March, 1995.	
/HN/	D-17	HYSOL® FP4650 Liquid Encapsulant Product Bulletin; Dexter Electronic Materials Division; 4 pgs; May, 1995.	
/HN/	D-18	BOUTIN, Lynda; "Mold Compound Study for Plastic Ball Grid Array Applications"; Proceedings of the Technical Program, NEPCON EAST '95"; June 12-15, 1995; Cover Page & pp 279-290; Boston.	
/HN/	D-19	BURKHART, Art et al.; "New Generation Encapsulants For Chips On Low Cost First Level Substrates"; Dexter Technical Paper; February, 1994; pp 1-8; USA	
/HN/	D-20	MANZIONE, Louis T.; "Plastic Packaging of Microelectronic Devices"; AT&T Bell Laboratories Publication; 1990; 4 pgs.	
/HN/	D-21	McPHERSON, J.W. et al; "A Novel Thermal Expansion Matched Heatspreader for Plastic Encapsulation of Silicon Chips"; 25 <sup>th</sup> Annual Proceedings, Reliability Physics 1987; April 7-9, 1987; Cover Page & pp 224-228; IEEE Catalog No. 87CH2388-7.	
/HN/	D-22	MURPHY, William; "Custom Molded Cavities"; Technical Papers, Regional Technical Conference, Society of Plastics Engineers, Inc.; March 6-7, 1985; 6 pgs.	

Examiner Signature	/Hung Ngo/	Date Considered	06/16/2010
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation, if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English Language Translation is attached.

*If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.*



# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

*Complete if Known*

Application Number	09/928,737
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Group Art Unit	2831
Examiner Name	Hung V. Ngo
Attorney Docket Number	SC09785T CD1

Sheet 3 of 3

## **NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
/HN/	D-23	MANGES, Prof. Dr. Georg et al.; "Electric-discharge machining (EDM);; How to Make Injection Molds; 1983; 5 pgs; Hanser Publishers.	
/HN/	D-24	SCHUMACHER, Dr. B.; "The Significance of Electrical Discharge Machining (EDM) IN Mold Making"; Mold-Making Handbook for the Plastics Engineer, Chapter 13, 1983; 17 pgs; MacMillan Publishers, NY.	
/HN/	D-25	HULL, John L.; "Equipment and Techniques for Plastic Encapsulation of Electrical and Electronic Devices"; 36 <sup>th</sup> Annual Technical Conference, Society of Plastics Engineers; April 24-27 1978; USA.	
/HN/	D-26	CORNER, Harold L.; "The Moldmaking Trades: The Key to Success or Failure of the Plastics Industry"; 36 <sup>th</sup> Annual Technical Conference, Society of Plastics Engineers; April 24-27, 1978; Cover Page & pp 172-174; USA.	
/HN/	D-27	FORTIN, M.J.; "Automated Rotary Transfer Encapsulation of Electronic Parts"; 28 <sup>th</sup> Annual Technical Conference, Society of Plastics Engineers, May 4-7, 1970; Cover Page & pp 160-161; USA.	
/HN/	D-28	KLUZ, John; "Methods of Producing Cores and Cavities"; Moldmaking and Die Cast Dies for Apprentice Training; Chapter VIII; 1967; National Tool, Die and Precision Machining Association; Washington, D.C.	
/HN/	D-29	JAMESON; E.C.; "Electrical Discharge Machining of Mold Cavities and Cores"; Technical Papers, SPE Regional Technical Conference: Tooling for Plastics-Design and Construction" September 30, 1965; Cover Page & pp 17-21; USA.	
/HN/	D-30	ROSS, Milton I.; "Electric Discharge Cutting of Mold Components"; Technical Papers, SPE Regional Technical Conference-Advances in Moldmaking and Mold Design; April 17, 1964; Cover Page pp 14-18, Society of Plastics Engineers.	

Examiner Signature	/Hung Ngo/	Date Considered	06/16/2010
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation, if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English Language Translation is attached.

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